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**TECHNICAL MANUAL**

Plastic Laminated Diagrams for Direct  
and General Support Maintenance  
**RECEIVER-TRANSMITTER, RADIO**  
**RT-841/PRC-77**  
(NSN 5820-00-930-3725)  
(Part of Radio Set AN/PRC-77)

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**NOTICE TO USERS**

This package contains a questionnaire on the Usability of Plastic laminated Diagrams for maintenance operations. To help us determine the value of these diagrams, please fill out the questionnaire, fold it where shown, and drop it in the mail.

If the questionnaire has been used, you can forward comments using DA Form 2028 (Recommended Changes to Publications and Blank Forms). Send to Commander, US Army Electronics Command, ATTN: DRSEL-MA-Q, Fort Monmouth, New Jersey 07703.

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By Order of the Secretary of the Army:

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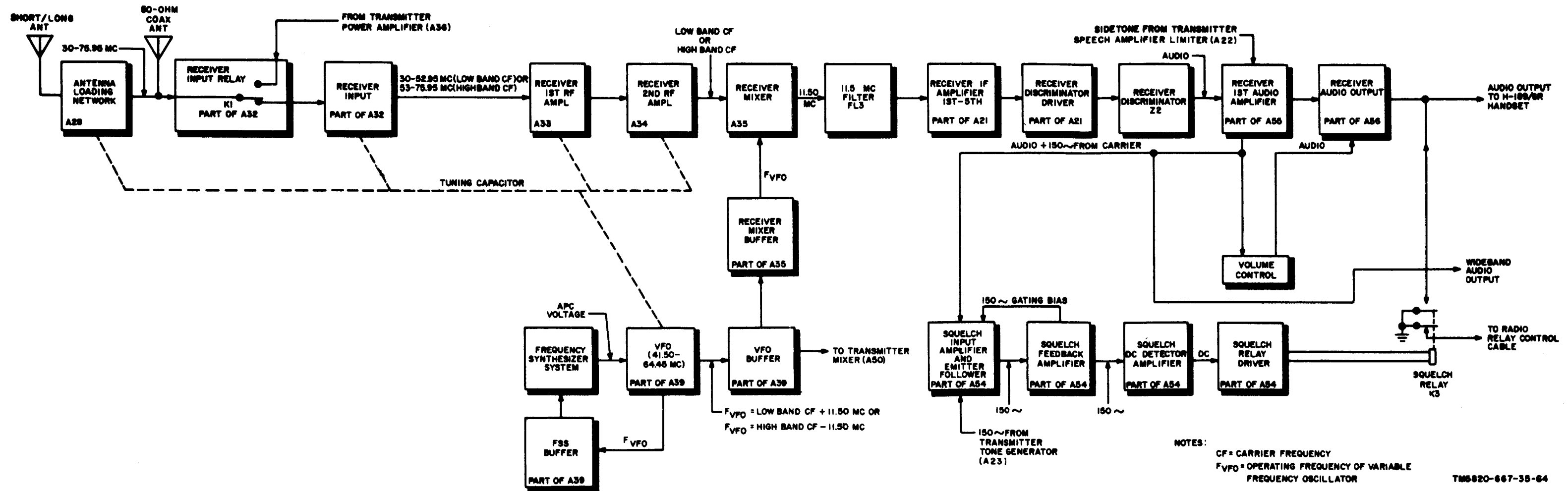


FIGURE 7-15. RECEIVER-TRANSMITTER, RECEIVE MODE SIGNAL PATH, BLOCK DIAGRAM.

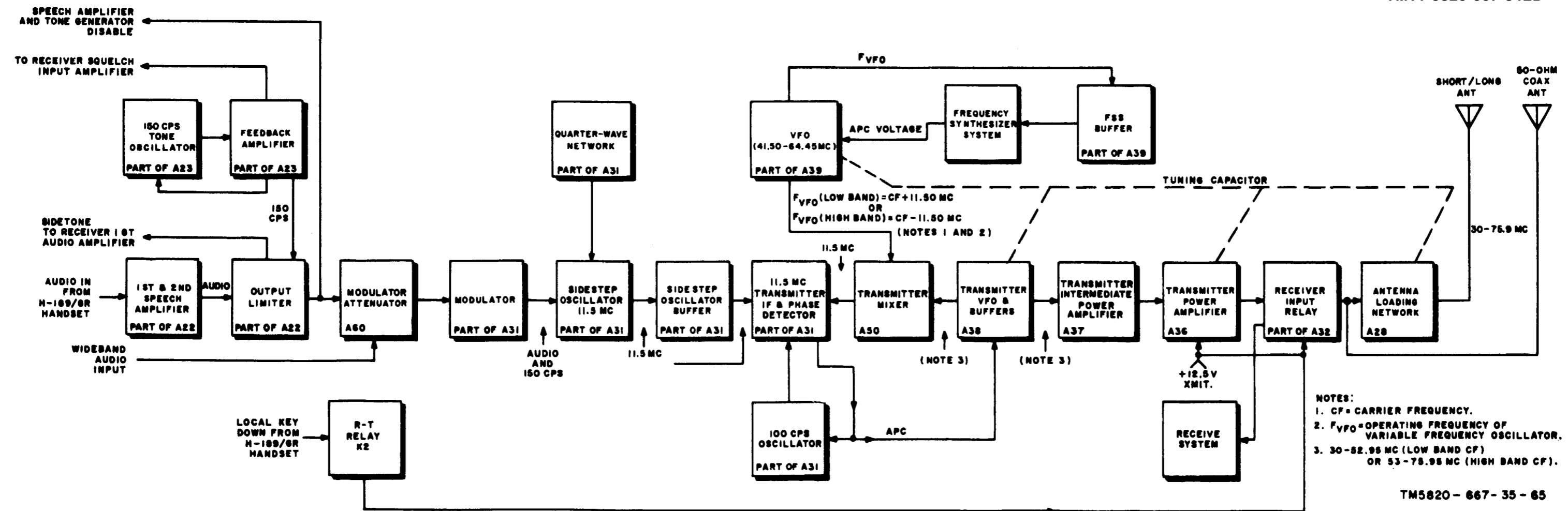
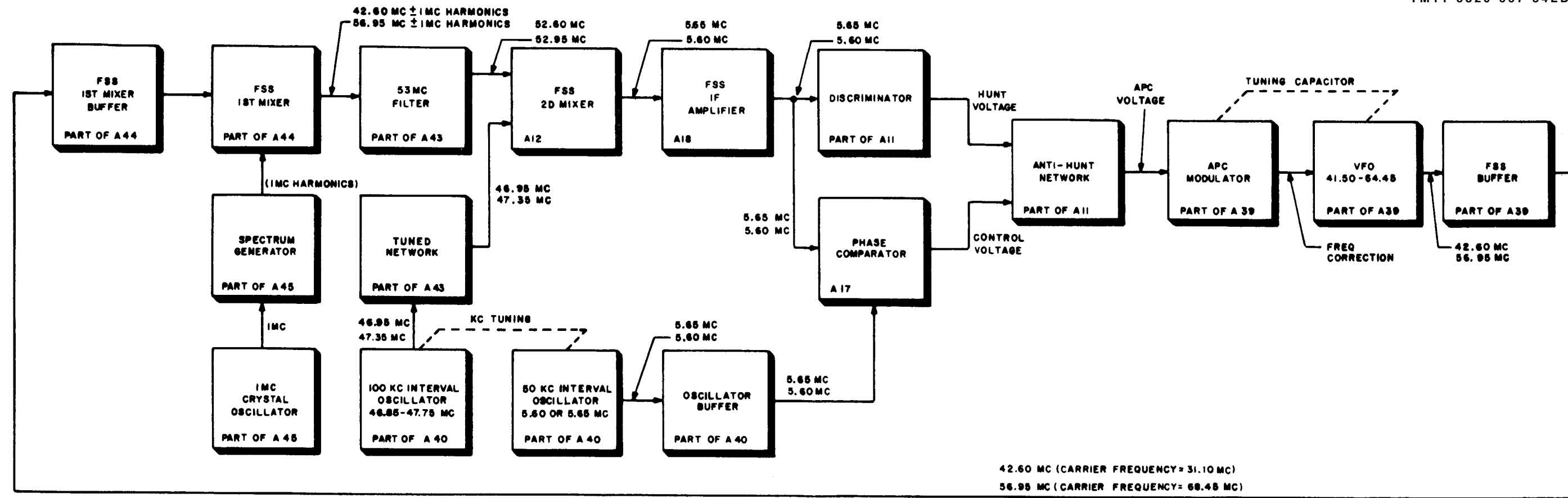


FIGURE 7-16. RECEIVER- TRANSMITTER, TRANSMIT MODE SIGNAL PATH, BLOCK DIAGRAM.

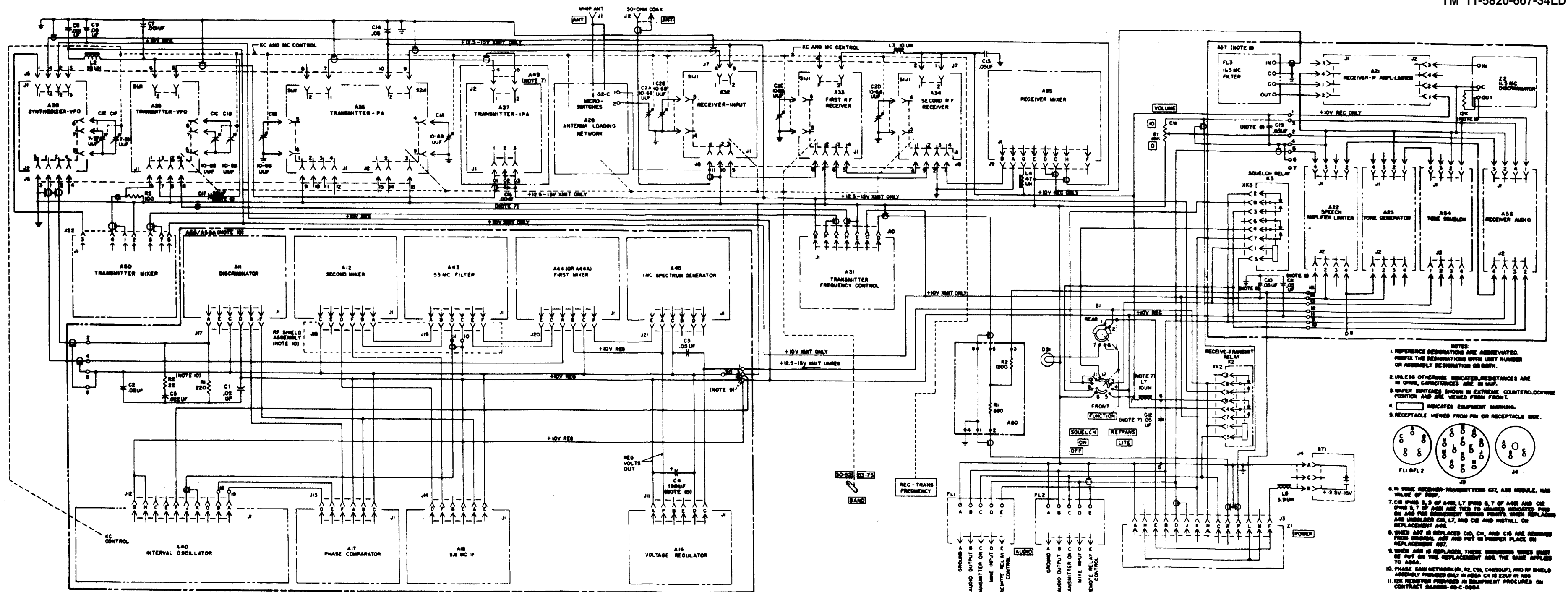


42.60 MC (CARRIER FREQUENCY = 31.10 MC)  
 56.95 MC (CARRIER FREQUENCY = 68.45 MC)

NOTES :

1. TWO RT-841/PRC-77 CARRIER FREQUENCIES ARE USED TO ILLUSTRATE THE FREQUENCY RELATIONSHIPS OF THE FSS 31.10 MC (LOW BAND), AND 68.45 MC (HIGH BAND). FREQUENCIES ASSOCIATED WITH THE LOW BAND CARRIER ARE INDICATED ABOVE THE FREQUENCIES ASSOCIATE WITH THE HIGH BAND CARRIER.
2. FSS DENOTES FREQUENCY SYNTHESIZER SYSTEM.

FIGURE 7-17. FREQUENCY SYNTHESIZER SYSTEM, BLOCK DIAGRAM.



- NOTES:
1. REFERENCE DESIGNATIONS ARE ABBREVIATED. PREFIX THE DESIGNATIONS WITH UNIT NUMBER OR ASSEMBLY DESIGNATION OR BOTH.
  2. UNLESS OTHERWISE INDICATED, RESISTANCES ARE IN OHMS, CAPACITANCES ARE IN UUF.
  3. WIPER SWITCHES SHOWN IN EXTREME COUNTERCLOCKWISE POSITION AND ARE VIEWED FROM FRONT.
  4. □ INDICATES EQUIPMENT MARKING.
  5. RECEPTACLE VIEWED FROM PIN OR RECEPTACLE SIDE.
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6. IN SOME RECEIVER-TRANSMITTERS C17, A58 MODULE, HAS VALUE OF 500P.
  7. C18 SPIN 2, 5 OF A58, L7 SPIN 6, 7 OF A48 AND C2 SPIN 6, 7 OF A58 ARE TIED TO UNMARKED POINTS ON A49 FOR CONVENIENT WIRING POINTS. WHEN REPLACING AND UNMARKED C18, L7, AND C2 AND INSTALL ON REPLACEMENT A48.
  8. WHEN A57 IS REPLACED C18, C19, AND C16 ARE REMOVED FROM GROUND, A57 AND PUT IN PROPER PLACE ON REPLACEMENT A57.
  9. WHEN A58 IS REPLACED, THESE CONNECTIONS WIRE MUST BE PUT ON THE REPLACEMENT AND THE BARE APPLIED TO A58A.
  10. PHASE GAIN NETWORK (R2, C24, C25, C26) AND RF SHIELD ASSEMBLY PROVIDED ONLY IN A58A C4 IS 22UF IN A58 REPLACEMENT A48.
  11. IXX RESISTORS PROVIDED IN EQUIPMENT PROCURED ON CONTRACT NUMBER 69-C-0884.
- EL8880-667-36-C1-TS-67

FIGURE 7-18. OVERALL CHASSIS INTERCONNECTION DIAGRAM, RT-841/PRC-77